

**OIL ACTIVATED FUEL
INJECTOR CONTROL WITH
DELAY PLUNGER**

ABSTRACT OF THE DISCLOSURE

5 An oil activated fuel injector which provides a pilot quantity of fuel prior to the
main fuel injection event. The oil activated fuel injector includes a throttle which
provides fluid communication between the high pressure chamber and a fuel bore which
leads to the nozzle of the oil activated fuel injector. The pilot quantity of fuel flows
through the throttle and into the fuel bore during a pre stroke of the plunger. The oil
10 activated fuel injector reduces engine emissions and noise, and eliminates the need for
additional working fluid to be provided therein in order to provide a pilot quantity of fuel.

TOP SECRET